

CLAIMS

1. A substantially pure, isolated or recombinant polypeptide which:
 - a) comprises or consists of the amino acid sequence shown in figure 2b, SEQ ID NO: 2;
 - b) is a derivative having one or more amino acid substitutions, deletions or insertions relative to the amino acid sequence shown in figure 2b, SEQ ID NO: 2; or
 - c) is a fragment of a polypeptide as defined in a) or b) above, which is at least ten amino acids long;
- 10 wherein the recombinant polypeptide comprises amino acids 73-86 of SEQ ID NO.: 2.
2. A polypeptide as claimed in claim 1 which is provided as part of a fusion polypeptide.
3. A polypeptide as claimed in claim 2 wherein the fusion polypeptide comprises Green Fluorescent Protein or the DsRed Fluorescent Protein.
4. An isolated or recombinant nucleic acid molecule which:
 - a) comprises or consists of the DNA sequence shown in Figure 2a or its RNA equivalent;
 - b) a sequence which is complementary to the sequences of a);
 - c) a sequence which codes for the same or polypeptide, as the sequences of a) or b);
 - d) a sequence which shows substantial identity with any of those of a), b) and c); or
 - e) a sequence which codes for a derivative or fragment of an amino acid molecule shown in Figure 1;
- 25 wherein the nucleic acid molecule comprises a nucleic acid sequence encoding amino acids 73-86 of SEQ ID NO.: 2.
- 5 A vector comprising one or more nucleic acid molecules as defined in claim 4.
- 30 6. A host cell transformed/transfected with a vector as defined in claim 5.
7. A substantially pure, isolated or recombinant polypeptide which:
 - a) comprises or consists of the amino acid sequence shown in figure 3b (SEQ ID NO.: 4);

5 b) is a derivative having one or more amino acid substitutions, deletions or insertions relative to the amino acid sequence shown in figure 3b; or
c) is a fragment of a polypeptide as defined in a) or b) above, which is at least ten amino acids long;

5 wherein the polypeptide comprises amino acids 194 to 203 of SEQ ID NO.: 4.

8 8 A polypeptide as claimed in claim 7 which is provided as part of a fusion polypeptide.

10 9. A polypeptide as claimed in claim 8 wherein the fusion polypeptide comprises Green Fluorescent Protein or the DsRed Fluorescent Protein.

10. An isolated or recombinant nucleic acid molecule which:

15 a) comprises or consists of the DNA sequence shown in Figure 3a (SEQ ID NO.: 3) or its RNA equivalent;
b) a sequence which is complementary to the sequences of a);
c) a sequence which codes for the same polypeptide, as the sequences of a) or b);
f) a sequence which shows substantial identity with any of those of a), b) and c); or
g) a sequence which codes for a derivative or fragment of an amino acid molecule shown in Figure 1;

20 wherein the nucleic acid comprises a nucleic acid sequence encoding amino acids 194 to 203 of SEQ ID NO.: 4.

11 11 A vector comprising one or more nucleic acid molecules as defined in claim 10.

25 12. A host cell transformed/transfected with a vector as defined in claim 11.

13. A method of screening for and/or diagnosis of a neurological or neuropsychiatric condition in a subject, which method comprises the step of detecting and/or quantifying the 30 amount of a polypeptide in a biological sample obtained from said subject, wherein the polypeptide is selected from:

a) the amino acid sequence shown in figures 2b or 3b (SEQ ID NO: 2 or SEQ ID NO.: 4);

- b) a derivative having one or more amino acid substitutions, deletions or insertions relative to the amino acid sequence shown in figures 2b or 3b (SEQ ID NO: 2 or SEQ ID NO.: 4); and
- c) a fragment of a polypeptide as defined in a) or b) above, which is at least ten amino acids long.

14. A method as claimed in claim 13, wherein the polypeptide is provided as part of a fusion polypeptide.

10 15. A method as claimed in claim 14, wherein the fusion polypeptide is selected from the group consisting of Green Fluorescent Protein and DsRed Fluorescent Protein.

16. A method for the prophylaxis and/or treatment of a neurological or neuropsychiatric condition in a subject, which comprises administering to said subject a therapeutically effective amount of at least one polypeptide, wherein the polypeptide is selected from:

- a) the amino acid sequence shown in figures 2b or 3b (SEQ ID NO: 2 or SEQ ID NO.: 4);
- b) a derivative having one or more amino acid substitutions, deletions or insertions relative to the amino acid sequence shown in figures 2b or 3b (SEQ ID NO: 2 or SEQ ID NO.: 4); and
- c) a fragment of a polypeptide as defined in a) or b) above, which is at least ten amino acids long.

17. A method of screening for and/or diagnosis of a neurological or neuropsychiatric
25 condition in a subject, which method comprises the step of detecting and/or quantifying the
amount of a nucleic acid in a biological sample obtained from said subject, wherein the nucleic
acid molecule:

- a) comprises the DNA sequence shown in Figure 2a or 3a (SEQ ID NO.: 1 or SEQ ID NO.: 3), or its RNA equivalent;
- b) has a sequence which is complementary to the sequences of a);
- c) has a sequence which codes for the same polypeptide as the sequences of a) or b);
- d) has a sequence which shows substantial identity with any of those of a), b) and c); or

10 e) has a sequence which codes for a derivative or fragment of an amino acid
molecule shown in Figure 2a or 3a (SEQ ID NO.: 1 or SEQ ID NO.: 3).

15 18. A method for the prophylaxis and/or treatment of a neurological or neuropsychiatric
condition in a subject, which comprises administering to said subject a therapeutically
effective amount of at least one nucleic acid as defined in claim 17.

19. An antibody, which binds to a polypeptide as defined in claims 1 or 7, or to a fragment
of such a polypeptide.

10 20. An antibody as claimed in claim 19, which binds specifically to a polypeptide as defined
in claims 1 or 7.

15 21. An antibody as claimed in claim 19 or claim 20, which is conjugated to a therapeutic
moiety.

22. An antibody as claimed in claim 21 wherein the therapeutic moiety is selected from a
second antibody or a fragment or derivative thereof, a cytotoxic agent or a cytokine.

20 23. A method for the prophylaxis and/or treatment of a neurological or neuropsychiatric
condition in a subject, which comprises administering to said subject a therapeutically
effective amount of an antibody, as defined in claims 19-22, which binds to at least one
polypeptide, wherein the polypeptide is selected from:

25 a) the amino acid sequence shown in figures 2b or 3b (SEQ ID NO: 2 or SEQ ID
NO.: 4);
b) a derivative having one or more amino acid substitutions, deletions or
insertions relative to the amino acid sequence shown in figures 2b or 3b (SEQ ID NO: 2 or
SEQ ID NO.: 4); and

30 c) a fragment of a polypeptide as defined in a) or b) above, which is at least ten
amino acids long.

24. A pharmaceutical formulation comprising at least one polypeptide, wherein the
polypeptide is selected from:

45 a) the amino acid sequence shown in figures 2b or 3b (SEQ ID NO: 2 or SEQ ID NO.: 4);
b) a derivative having one or more amino acid substitutions, deletions or
insertions relative to the amino acid sequence shown in figures 2b or 3b (SEQ ID NO: 2 or
5 SEQ ID NO.: 4); and
c) a fragment of a polypeptide as defined in a) or b) above, which is at least ten
amino acids long;

at least one nucleic acid molecule wherein the nucleic acid molecule:

10 a) comprises the DNA sequence shown in Figure 2a or 3a (SEQ ID NO.: 1 or
SEQ ID NO.: 3), or its RNA equivalent;

15 b) has a sequence which is complementary to the sequences of a);
c) has a sequence which codes for the same polypeptide as the sequences of a) or
b);
d) has a sequence which shows substantial identity with any of those of a), b) and
c); or
e) has a sequence which codes for a derivative or fragment of an amino acid
molecule shown in Figure 2a or 3a (SEQ ID NO.: 1 or SEQ ID NO.: 3);
or at least one antibody that binds to said polypeptide, optionally together with one or more
pharmaceutically acceptable excipients, carriers or diluents.

20 25. A pharmaceutical formulation as claimed in claim 24, wherein the pharmaceutical
formulation is a vaccine.

25 26. A pharmaceutical formulation as claimed in claim 25, which comprises one or more
suitable adjuvants.

27. A method for the prophylaxis and/or treatment of a neurological or neuropsychiatric
condition in a subject, which comprises administering to said subject a therapeutically
effective amount of at least one polypeptide, wherein the polypeptide is selected from:

30 a) the amino acid sequence shown in figures 2b or 3b (SEQ ID NO: 2 or SEQ ID
NO.: 4);
b) a derivative having one or more amino acid substitutions, deletions or
insertions relative to the amino acid sequence shown in figures 2b or 3b (SEQ ID NO: 2 or
SEQ ID NO.: 4); and

15 c) a fragment of a polypeptide as defined in a) or b) above, which is at least ten
amino acids long;
at least one nucleic acid molecule wherein the nucleic acid molecule:
5 a) comprises the DNA sequence shown in Figure 2a or 3a (SEQ ID NO.: 1 or
SEQ ID NO.: 3), or its RNA equivalent;
b) has a sequence which is complementary to the sequences of a);
c) has a sequence which codes for the same polypeptide as the sequences of a) or
b);
10 d) has a sequence which shows substantial identity with any of those of a), b) and
c); or
e) has a sequence which codes for a derivative or fragment of an amino acid
molecule shown in Figure 2a or 3a (SEQ ID NO.: 1 or SEQ ID NO.: 3);
or at least one antibody that binds to said polypeptide.

20 28. A method of screening for compounds that modulate the expression of a polypeptide
as defined in claims 1 or 7, which comprises the step of determining the presence or absence
and/or quantifying at least one polypeptide as defined in claims 1 or 7 or at least one antibody
as defined in claim 19 or claim 20 in a biological sample.

29. A method for monitoring/assessing a neurological or neuropsychiatric condition
treatment in a patient, which comprises the step of determining the presence or absence
and/or quantifying at least one polypeptide as defined in claims 1 or 7 or at least one antibody
as defined in claim 19 or claim 20 in a biological sample obtained from said patient.